

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:
PAUL D. GREELEY
OHLANDT, GREELEY, RUGGIERO & PERLE
10TH FLOOR
ONE LANDMARK SQUARE
STAMFORD, CT 06901-2682

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Applicant's or agent's file reference
1700.181WOU

FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/US04/33173	International filing date (day/month/year) 08 October 2004 (08.10.2004)	Priority date (day/month/year) 10 October 2003 (10.10.2003)
International Patent Classification (IPC) or both national classification and IPC IPC(7): B65D 55/02 and US Cl.: 215/219		
Applicant PECHINEY PLASTIC PACKAGING INC.		

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1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230</p>	<p>Authorized officer Lee Young <i>Sharon N. Greener</i> Telephone No. (571) 272-4050</p>
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International Application No.

PCT/US04/33173

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US04/03173

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims 1-46 YES
Claims NONE NO

Inventive step (IS)

Claims NONE YES
Claims 1-46 NO

Industrial applicability (IA)

Claims 1-46 YES
Claims NONE NO

2. Citations and explanations:

Please See Continuation Sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

Claims 7, 10, 28, and 39-45 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 7, 10, 28, and 39 are indefinite for the following reason(s):

Regarding claims 7 and 28, it is unclear how a "notch," a phrase which implies material removed from a solid object, can bear the flat surface. It is suggested the Applicant reword the claim to define the structure that is physically present, not that which is not, as implied by the word "notch."

Regarding claim 10, the limitation "the edge," at the end of line 1 and wrapping to line 2 of the claim, lacks antecedent basis.

Regarding claim 39, the limitation "the first thread of the neck," in line 5 of the claim lacks antecedent basis.

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International application No.
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

1) Claims 1-5, 7, 10, 14-16, 19-29, 32-39, 41-43 and 46 lack an inventive step under PCT Article 33(3) as being obvious over Minnette et al. US 5,988,412.

Minnette '412 teaches a dispensing container (26) with a neck (32) and a generally flat shoulder, two lugs (34) extending from the shoulder, a first thread (30), and a closure (10) with a generally circumferential outer skirt (18), a generally circumferential inner skirt (20), a second thread (22), and a slot (16) defining a vertical edge. Examiner notes the lugs extend from a region which borders both the neck and the shoulder. Regarding claim 10, the vertical orientation of the sides of the slot comprise 90-degree angles, and are thus "angular."

Regarding claims 1, 20-21, 24, 35-36 and 46, with respect to the size and configuration of the threads, Examiner asserts it is obvious and well known to configure the threads to any suitable dimension and pitch, motivated by the benefit of providing a controlled opening, while adequately securing the closure cap to the container neck.

Regarding claims 14-15, 32-33, with respect to the diameter of the shoulder, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the container and shoulder to 0.5 to 0.75 inches, or any other suitable size, motivated by design choice to configure the container to hold a specific volume of contents. It is well known to vary the size of containers to vary the container volume, to provide a user with a particular quantity of a product.

Regarding claim 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shape of the container to taper the skirts to 0.5 degrees to the longitudinal axis, or any other configuration, because such a modification is mere change in shape of a design.

2) Claims 1-4, 6, 8-10, 14-16, 19-25, 27, 29-39, 43 and 46 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351.

Uhlig '351, in the embodiment of figures 9-14, teaches a dispensing container (31) with a neck (34) and a generally flat shoulder (35), two lugs (36) extending from the shoulder, a first thread (34a), and a closure (38) with a generally circumferential outer skirt (41), a generally circumferential inner skirt (42), a second thread (42b), and a slot (44) defining a vertical edge.

Regarding the size and configuration of the threads, Examiner asserts it is obvious and well known to configure the threads to any suitable dimension and pitch, motivated by the benefit of providing a controlled opening, while adequately securing the closure cap to the container neck.

Regarding claims 1, 20-21, 24, 35-36 and 46, with respect to the size and configuration of the threads, Examiner asserts it is obvious

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and well known to configure the threads to any suitable dimension and pitch, motivated by the benefit of providing a controlled opening, while adequately securing the closure cap to the container neck.

Regarding claims 14-15, 32-33, with respect to the diameter of the shoulder, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the container and shoulder to 0.5 to 0.75 inches, or any other suitable size, motivated by design choice to configure the container to hold a specific volume of contents. It is well known to vary the size of containers to vary the container volume, to provide a user with a particular quantity of a product.

Regarding claims 16 and 43, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shape of the container to taper the skirts to 0.5 degrees to the longitudinal axis, or any other configuration, because such a modification is mere change in shape of a design.

3) Claims 5 and 26 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351 in view of Uhlig US 3,949,893.

Uhlig '351 does not teach the lugs extending radially outward from the container neck.

Uhlig '893 teaches lugs (40) extending radially outward from the container neck.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lugs of Uhlig '351, providing the integral neck lugs taught by Uhlig '893, because the lugs are mechanical equivalents and would function equally well.

4) Claims 7 and 28 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351 in view of Kusz US 5,687,863.

Uhlig '351 does not teach the notch bearing a flat surface.

Kusz '863 teaches a lug (52) with a notch bearing flat surface (54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lugs of Uhlig '351, providing the notched lugs taught by Kusz '863, because the lugs are mechanical equivalents and would function equally well.

5) Claims 11 and 40 lack an inventive step under PCT Article 33(3) as being obvious over Minnette et al. US 5,988,412 in view of McKirman US 3,854,622.

Minnette '412 teaches grip knurls (36) but does not disclose the structure or plurality of the region.

McKirman '622 teaches grip portion (45) located at the bottom edge of the outer skirt, and extending upwardly, for locating a depressible region and providing grip.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Minnette '412, providing the grip taught by McKirman '622, motivated by the benefit of locating and improving the grip of a user when compressing the cap skirt during removal.

6) Claims 11 and 40 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351 in view of Herr US 6,357,615.

Uhlig '351 does not teach knurls.

Herr '615 teaches ribs (114a) for gripping, which extend from a lower edge of a skirt outer surface in an upward direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the skirt of Uhlig '351, providing ribs such as those taught by Herr '615, motivated by the benefit of improving the grip of a user when removing the cap.

7) Claims 12-13 and 41-42 lack an inventive step under PCT Article 33(3) as being obvious over Minnette et al. US 5,988,412 in

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view of Earls US 4,273,247.

Minnette '412 does not teach three to six ribs extending from an inner surface of the outer skirt from the middle toward the top end.

Earls '247 teaches six ribs (31), extending from about midway along an outer skirt, which support an inner skirt.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Minnette '412, providing the ribs taught by Earls '247, motivated by the benefit of bracing the inner skirt.

8) Claims 17 and 44 lack an inventive step under PCT Article 33(3) as being obvious over Minnette et al. US 5,988,412 in view of Mumford US 4,134,513.

Minnette '412 does not teach a plug seal.

Mumford '513 teaches a sealing plug (25) for sealing a container opening.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Minnette '412, providing the plug seal taught by Mumford '513, motivated by the benefit of sealing the closure opening.

9) Claims 17 and 44 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351 in view of Mumford US 4,134,513.

Uhlig '351 does not teach a plug seal.

Mumford '513 teaches a sealing plug (25) for sealing a container opening.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Uhlig '351, providing the plug seal taught by Mumford '513, motivated by the benefit of sealing the closure opening.

10) Claims 18 and 45 lack an inventive step under PCT Article 33(3) as being obvious over Minnette et al. US 5,988,412 in view of Klima, Jr. et al. US 6,319,453.

Minnette '412 does not teach a foam layer adapted to seal the orifice when the closure is in the locking position.

Klima '453 teaches seal (30) for sealing an orifice when a closure is in a locking position, and discloses in col. 10, line 54, the seal is formed of foam.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Minnette '412, providing a foam seal, such as that taught by Klima '453, motivated by the benefit of sealing the container when the closure is in the locking position.

11) Claims 18 and 45 lack an inventive step under PCT Article 33(3) as being obvious over Uhlig US 4,116,351 in view of Klima, Jr. et al. US 6,319,453.

Uhlig '351 does not teach a foam layer adapted to seal the orifice when the closure is in the locking position.

Klima '453 teaches seal (30) for sealing an orifice when a closure is in a locking position, and discloses in col. 10, line 54, the seal is formed of foam.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Uhlig '351, providing a foam seal, such as that taught by Klima '453, motivated by the benefit of sealing the container when the closure is in the locking position.

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